

Serial No. 09/754,278
Docket No. NEC00P344-si

2

AMENDMENTS TO THE CLAIMS:

1. (Canceled)

2. (Currently amended) A mobile communication system, comprising:

one or more base stations disposed in each of service areas for performing radio communication with a mobile station positioned in any of said service areas;

one or more base station controllers serving as a master station of said one or more base stations and having channel station data indicative of whether there is a channel between a mobile switching center as a master station thereof and another system mobile switching center in another system of different specifications, said one or more base station controllers having means for, when a mobile station enters the service area of the other system and then an inter-system hand-off control process is to be performed via said mobile switching center as the master station while communicating with said mobile station through said base station during ~~an inter-base-station-controller soft hand-off control process~~, determining whether or not, based on said channel station data, said mobile switching center as the master station has a channel connected to the other system mobile switching center, and, if said mobile switching center as the master station has a channel connected to the other system mobile switching center, requesting an inter-system hand-off control process as a process for switching communication channels between said mobile station and said other system mobile switching center to said mobile switching center as the master station, and, if said mobile switching center as the master station does not have a channel connected to the other system mobile switching center, requesting an intra-system hand-off control process between said mobile station and the mobile switching center in a home system; and

one or more interconnected mobile switching centers serving as a master station of at least one of said one or more base station controllers, for performing said hand-off control process in a home system when the intra-system hand-off control process is requested, at least one of said one or more interconnected mobile switching centers having a communication channel connected to the other system mobile switching center, for performing a predetermined hand-off control process between itself and said other system mobile switching center when said inter-system hand-off control process is requested.

Serial No. 09/754,278
Docket No. NEC00P344-si

3

wherein each said one or more mobile switching centers comprises means for, when said intra-system hand-off control process is requested, selecting a mobile switching center in the home system which has a communication channel connected to said other system mobile switching center, and performing a hand-off control process between itself and the selected mobile switching center.

3. (Original) A mobile communication system according to claim 2, further comprising a communication channel between only a mobile switching center adjacent to a service area of the other system including an overlay and said other system mobile switching center.
4. (Canceled)
5. (Original) A mobile communication system according to claim 2, wherein said home system comprises a mobile communication system according to code division multiple access principles.
6. (Original) A mobile communication system according to claim 3, wherein said home system comprises a mobile communication system according to code division multiple access principles.
7. (Canceled)
8. (Currently amended) A base station controller in a mobile communication system, said base station controller comprising:
an interconnection to a first mobile switching center, said interconnection center in a first mobile communication system;
a memory having stored therein a channel station data indicative of whether there is a channel between said first mobile switching center as a master station thereof and a second mobile switching center located in a second system, said second system having a specification different from said first system; and
a control module for, when a mobile station enters a service area of said second system

Serial No. 09/754,278
Docket No. NEC00P344-si

4

and a hand-off control process is to be performed via said first mobile switching center as the master station while communication with a said mobile station through a base station controlled by said base station controller, determining from said channel station data whether or not said first mobile switching center as the master station has a channel connected to said second mobile switching center or not, based on said channel station data, wherein:

if said first mobile switching center is determined to have said connection to said second mobile switching center, said control module requests an inter-system hand-off, and,

if said first mobile switching center is determined not to have said connection to said second mobile switching center, said control module requests an intra-system hand-off to another mobile switching center in said first system that does have said connection to said second mobile switching center.

9. (Currently amended) The base station controller of claim 8, wherein, if said first mobile switching center as the master station has a channel connected to said second mobile switching center, said control module further requests a hand-off control process as a process for switching communication channels for communication with said mobile station said first system comprises a mobile communication system according to code division multiple access principles.

10. (Currently amended) A method of communicating with a mobile station, said method comprising:

providing a base station controller in a first mobile communication system wherein a mobile station is located, said base station controller having an interconnection to a first mobile switching center in said first system, said interconnection base station controller having stored in a memory therein a channel station data indicative of whether there is a channel between said first mobile switching center serving as a master station thereof and a second mobile switching center in a second mobile communication system, said second mobile communication system having a specification different from a specification of said first system; and

determining, based on said channel station data, when a mobile station enters a service

Serial No. 09/754,278
Docket No. NEC00P344-si

5

area of said second system and then a hand-off control process is to be performed via said first mobile switching center as the master station while communication with a said mobile station through a base station controlled by said base station controller to a base station in said second system, whether or not said first mobile switching center as the master station has a channel connected to said second mobile switching center;

if it is determined that no channel is connected, requesting an intra-system handoff to another mobile switching center in said first system that has such connection; and

if it is determined that a channel is connected, requesting an inter-system handoff to said second mobile switching center in said second system.

11. (Currently amended) The method of claim 10, further comprising:

if said first mobile switching center as the master station has a channel connected to said second mobile switching center, requesting a hand-off control process as a process for switching communication channels for communication with said mobile station wherein said first system comprises a mobile communication system according to code division multiple access principles.

12. (Currently amended) The mobile communication system method of claim + 10, wherein said master station comprises a home system for a mobile station, and said channel between said master station and said another mobile switching center comprises an interconnection to exchange information of mobile stations between mobile switching centers a communication channel between a mobile switching center in said first system and a mobile switching center in said second system occurs only between a mobile switching center in said first system that is adjacent to a service area of said second system and that includes an overlay.

13-17. (Canceled)